

Pseudomonas, Bacillus, Escherichia, Enterococcus, and Klebsiella;

Revised.
exposing said bacteria to biological, chemical or physical stress so that the bacteria release a stress release product;

[collecting said supernatant,] separating said medium and stress release product from said bacteria to form a filtered product;

and;

administering [said supernatant-] said filtered product to said animal.

2
3. (Amended)

to
The method of claim 1 wherein ^{the} said step of stressing said bacteria is selected from the group consisting of:
altering the pH of said media to affect the bioavailability of nutrients in said media,
removing nutrients from said media,
crowding by reducing the volume of said media, [or by] adding additional bacterial to said media, and
removing said bacteria from said media by centrifugation and resuspending said bacteria in a non-nutritive isotonic solution.

[Please cancel claim 5. ✓

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(Amended)

A¹³ The method of claim 3 wherein said non-nutritive isotonic solution is 0.1M phosphate buffer[,] having a pH of 7.5.

Please cancel claims 8-14 without prejudice as being drawn to a non-elected invention.

Please cancel claims 15-23.

Please enter new claims 24-34 into the record:

24. (New)

A method for modulating the immune system of an animal comprising:
administering to said animal a product released by bacteria in response to stress, wherein the product comprises stress response factors of a size less than 10 kDa, and further providing that the bacteria is of a class selected from the group consisting of *Lactobacillus*, *Staphylococcus*, *Streptococcus*, *Pseudomonas*, *Bacillus*, *Escherichia*, *Enterococcus*, and *Klebsiella*;
and further providing that the product is administered to the animal in a delivery form selected from the group consisting of gels for oral delivery, lozenges for oral delivery, nasal sprays, ear drops, vaginal creams, vaginal suppositories, and topical ointments.

contd.

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5 25. (New)

The method of claim 24 wherein said animal is selected from the group consisting of humans, poultry and livestock.

7
5 26. (New)

said stress release product

B The method of claim 24 wherein ~~the product is~~
administered in a concentration of about 1000 to 50,000 AU of
said stress release product
~~stress factors~~/ml.

27. (New)

B 4 contd.
The method of claim 24 wherein the product is administered in a delivery form selected from the group consisting of gels for oral delivery, lozenges for oral delivery, nasal sprays, ear drops, vaginal creams, vaginal suppositories, and topical ointments.

8
7 28. (New)

said stress release product

B The method of claim 26 wherein ~~the product is~~
administered orally or parenterally.

9
5 29. (New)

product has

A B The method of claim 24 wherein the stress release ~~factors~~
~~have~~ a size of between 0.5 and 3 kDa.

10
5 30. (New)

said stress release product

B The method of claim 24 wherein ~~the product is~~
administered daily for five consecutive days.

11
31. (New)

said stress release product

The method of claim 24 wherein the product is administered with a killed pathogen to produce higher levels of circulating antibodies against the killed pathogen.

32. (New)

A method of maintaining the viability of starter bacteria in during storage and shipment comprising: administering to said starter bacteria a product released by bacteria in response to stress, wherein the product comprises stress response factors of a size less than 10 kDa, and further providing that the bacteria is of a class selected from the group consisting of *Lactobacillus*, *Staphylococcus*, *Streptococcus*, *Pseudomonas*, *Bacillus*, *Escherichia*, and *Klebsiella*.

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A Contd.
sub B37

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33. (New)

The method according to claim 1 wherein the bacteria is selected from the group consisting of *L. acidophilus*, *L. casei*, *L. fermentum*, *L. plantarum*, *L. monocytogenes*, *S. aureus*, *S. typhimurium*, *P. acidolactici*, *B. coryneforme*, *E. coli*, *E. faecium*, *S. pyogenes*, and *K. pneumoniae*.

pneumoniae
1

34. (New)

A method for activating and modulating the immune system of an animal comprising:
growing bacteria in a medium, wherein the bacteria is selected from the group consisting of *L. acidophilus*, *L. caseii*, *L. fermentum*, *L. plantarum*, *L. monocytogenes*, *S. aureus*, *S. typhimurium*, *P. acidolactici*, *B. coryneforme*, *E. coli*, *E. faecium*, *S. pyogenes*, and *K. pneumoniae*.;
exposing said bacteria to biological, chemical or physical stress such that the bacteria release a stress release product;
filtering the bacteria from the medium and stress release product to form a filtered product;
administering the filtered product to said animal.

4 per B47
Revised

REMARKS

Election/Restriction Requirement

In response to the Examiner's restriction requirement, Applicant hereby elects to prosecute claims 1-7 and 15-23 without prejudice.

Claim Objections

Claim 18 was objected to as having an improper Markush format. Claim 18 has now been canceled, thus rendering this ground of objection moot.